

NEW ABSTRACT:

Please replace the original abstract with the following new abstract:

Abstract of the Disclosure

A fuel injection system having an injection valve, a line supplying fuel at high pressure to the injection valve a control valve controlling the pressure in a control chamber communicating with the line. The control valve has a movable valve part is actuatable by an actuator via a hydraulic coupler having two pistons cooperating with a coupler volume of the coupler. A seat of the movable valve part has an inside cross-sectional area f_3 , with means for filling the coupler volume via guide gaps of the pistons with fuel under pressure. The pistons are located parallel to and inside one another and a booster chamber is located on the ends of the pistons toward the actuator. In the interior of the outer piston defines a filling chamber which communicates with the line and one of the pistons has a cross-sectional area f_4 is mechanically coupled to the actuator via a rod having a cross-sectional area f_5 . The other piston which has a piston area f_2 , actuates the control valve via a rod having a cross-sectional area that is smaller than f_2 and the direction of the closing motion of the movable valve part matches the direction of fuel flowing out of the control chamber so that the control valve is at least partially force-balanced because of the pressure acting on the further piston in the booster chamber.